Operating Instructions

STEREO DOUBLE CASSETTE DECK AMPLIFIER

DC-Z85

FM/AM DIGITAL SYNTHESIZER TUNER

F-Z95

STEREO TURNTABLE

PL-Z85

SD, YPW

Thank you for buying this PIONEER product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

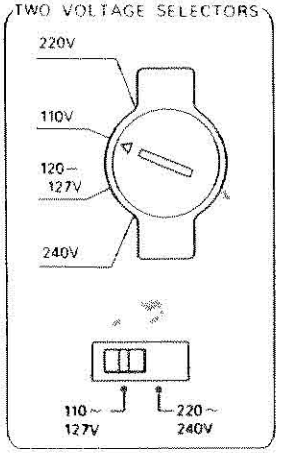
WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

If the socket outlets on the associated equipment are not suitable for the plug supplied with the product the plug must be removed and an appropriate one be fitted.
The cut-off plug must be disposed of as an electrical shock hazard could exist if connected to a socket outlet.

LINE VOLTAGE SELECTOR SWITCHES

Only multi voltage models are provided with these switches. U.S., Canadian, European, U.K., and Australian models are not provided with them.
Mains voltages in Saudi Arabia are 127 V and 220 V only. Never use this model with 110 V setting in Saudi Arabia.
Before your model is shipped from the factory, these switches are set to the power requirements of the destination; nevertheless, you should check that they are set properly before plugging the power cord into the AC outlet.

1. Disconnect the power cord.
2. Use a medium-size screwdriver.
3. Insert the screwdriver into the groove on the voltage selectors and adjust the voltage value of your area.



IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

PIONEER®
The Art of Entertainment

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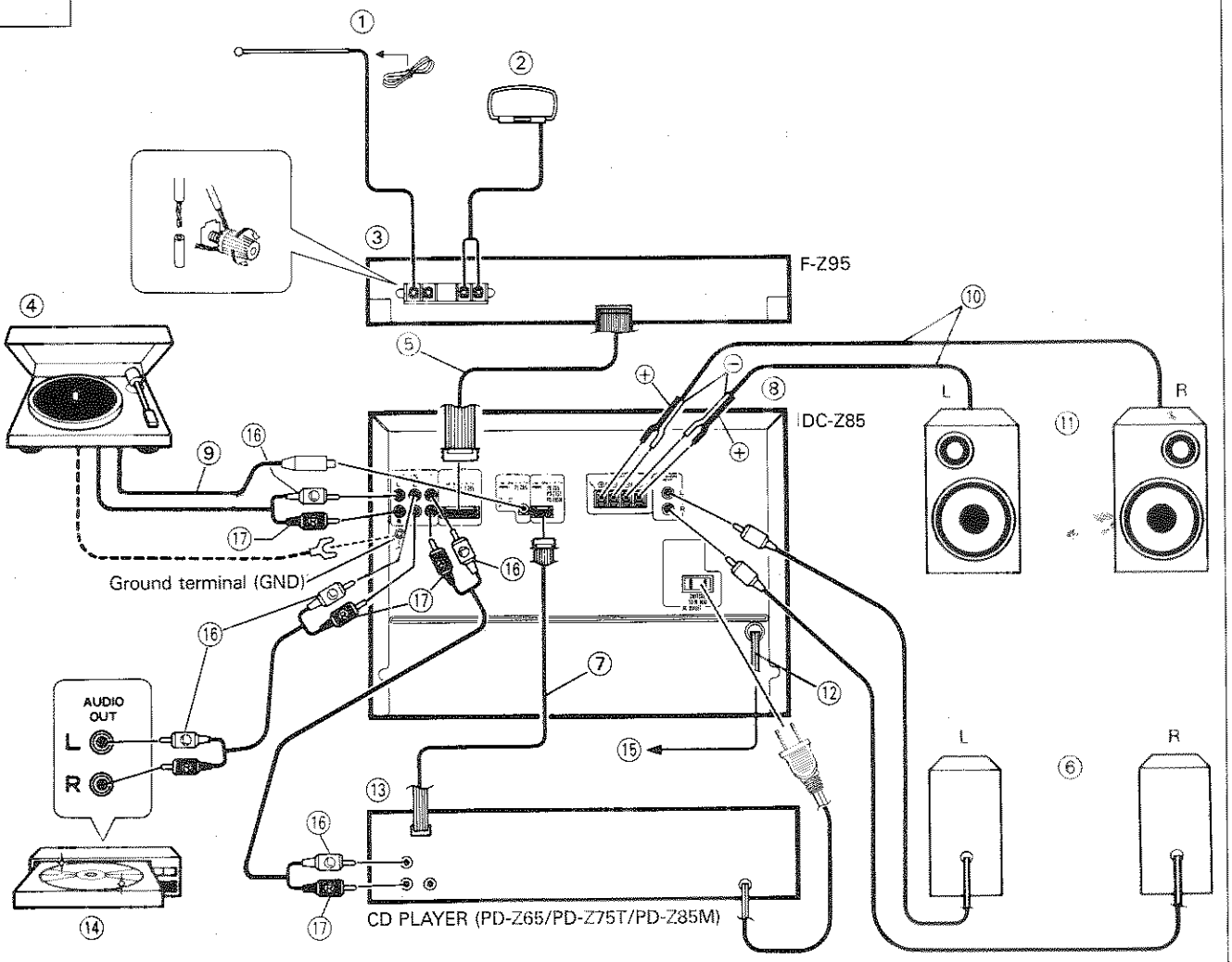
CONNECTIONS

1



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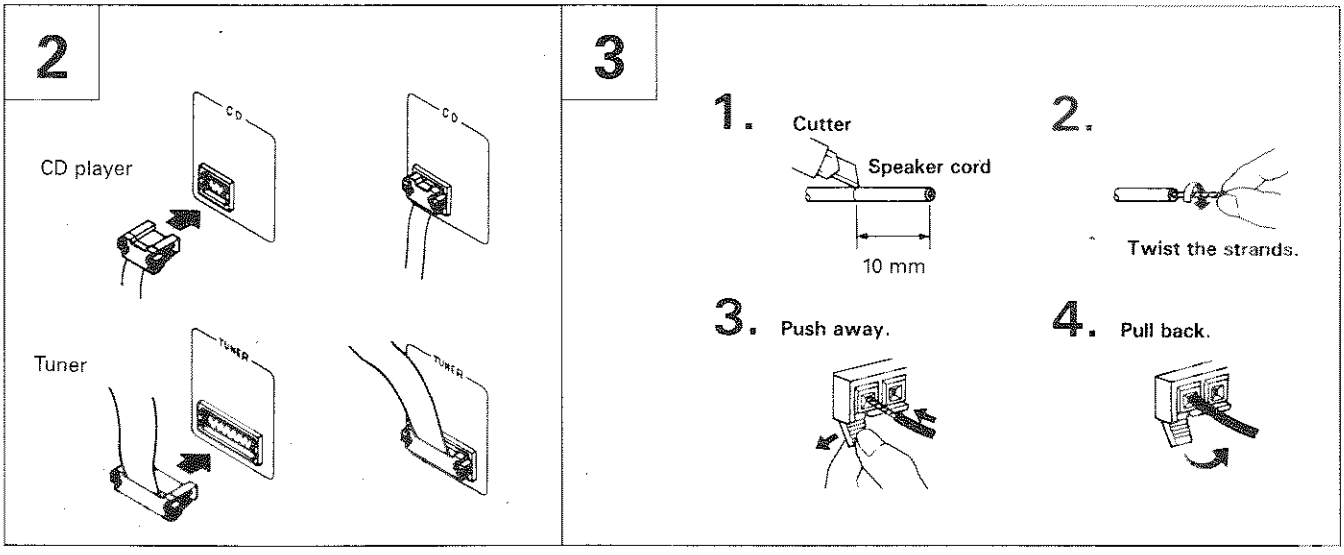


Refer to page 2 for the connections diagram [1].

① Accessory FM antenna
② Accessory AM loop antenna
③ FM/AM tuner (F-Z95)
④ Turntable (PL-Z85, etc.)
⑤ Tuner input/output cord
⑥ Surround speaker system
⑦ CD player flat cable
⑧ Cassette deck amplifier (DC-Z85)
⑨ Turntable power supply cord
⑩ Speakers cord
⑪ Speaker system
⑫ Power cord
⑬ CD player (Separately sold PD-Z65, PD-Z75T or PD-Z85M)
⑭ LD player or video cassette recorder (VCR)
⑮ To the AC wall socket
⑯ Audio cord (White)
⑰ Audio cord (Red)

Plug the power cord into the household electrical outlet only after all the connections have been completed.

Proceed as follows with the set up and connections.

1. **Place the cassette deck amplifier on top of the CD player.**
2. **Connect the CD player OUTPUT jacks to the cassette deck amplifier CD INPUT jacks with audio cords.**
   If using this unit together with the optional CD player PD-Z65, PD-Z75T or PD-Z85M, connect the flat cable ⑦ .
3. **Place the tuner on top of the cassette deck amplifier.**
4. **Connect the tuner input/output cord ⑤ to cassette deck amplifier.**
   TUNER AND CD PLAYER CONNECTIONS (Fig. [2])
   Insert the connector until it locks, thus ensuring that it is connected. When disconnecting the connector, pull it in the opposite direction while pressing the left and right claws.

NOTE:
When connecting or disconnecting the input/output cable, do so only after disconnecting the power plug from the wall socket.

5. **Connect the FM antenna ① and the AM loop antenna ② to the tuner's antenna terminals.**
6. **Place the turntable on top of the tuner.**
7. **Connect the turntable power supply cord ⑨ and audio cords ⑮ ⑯ to the cassette deck amplifier's jacks.**
   If using the turntable PL-Z85, connect the turntable's audio cords and power supply cord respectively to the cassette deck amplifier's PHONO jacks and DC 12V OUTPUT jack.
   If using a different turntable, connect its audio cord and ground cord.
8. **Use the "LD/VCR" jacks for connection to the audio output jacks of an LD player or VCR.**

NOTE:
- *Insert the plugs securely into the jacks. Improper connection can lead to sound distortion or malfunction.*
- *The white plug is for the left channel connection and the red plug for the right channel connection.*

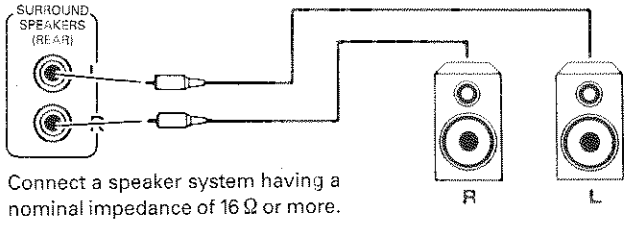
9. **Connect the speaker cords ⑩ to SPEAKERS terminals. (Fig. [3])**
   Connect the "+" terminals on the cassette deck amplifier to the "+" terminals on the speakers, the "—" terminals on the cassette deck amplifier to the "—" terminals on the speakers.

NOTE:
Do not allow the conductors of the cords to project out of the terminals or to come into contact with other conductors. A breakdown or failure may occur when conductors touch.

Speaker impedance
Connect speaker systems with a nominal impedance ranging from 6 to 16 Ω.

Surround speaker connection

Connect the plugs properly.



Connect a speaker system having a nominal impedance of 16 Ω or more.

10. **Connect the CD player's power cord to the deck amplifier's AC OUTLET.**
11. **Finally, connect the power cord ⑫ to the AC wall socket.**

CAUTION CONCERNING TURNTABLE INSTALLATION

If the turntable is placed directly on or very close to a speaker, the vibrations from the speaker may be transported to the tonearm's cartridge, thus causing feedback howling. Be sure that speakers are placed sufficiently away from the turntable.

CONDENSATION

When the unit is brought into a warm room from previously cold conditions or when the room temperature is suddenly increased, condensation may form inside and the unit may not be able to attain its full performance. If this occurs, allow the unit to stand for about an hour or raise the room temperature gradually.

ANTENNA CONNECTIONS

4

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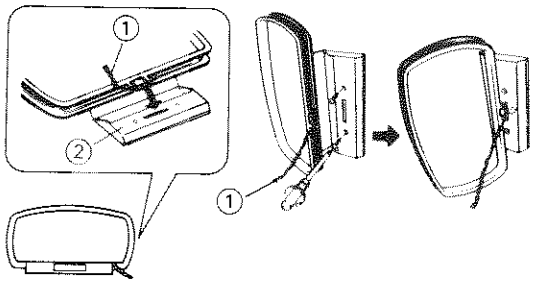

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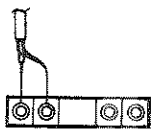

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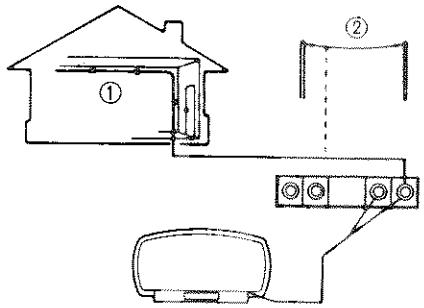


Radio reception is not possible unless the antenna is properly connected.

The strength of broadcast signals varies from one area to another. Signal propagation is especially poor in metropolitan areas, where there are many tall buildings, and in mountainous areas. Proper antenna installation is vital to good reception.

FM ANTENNA

FM Antenna Attachment (Fig. [4])

Connect the accessory FM antenna to the FM terminals. Extend the antenna out to its full length, and affix it to a wall, etc.

External FM antenna installation (Fig. [5])

Use an external antenna when the signals from the station are weak and cannot be picked up by the accessory FM antenna, or when the sound heard is accompanied by large amounts of noise.

AM ANTENNA

The AM loop antenna supplied with the tuner should be connected to the AM antenna terminals. The antenna should be placed at a distance from the tuner, and should not be allowed to touch metallic objects. Avoid placing it near CD players, personal computers, television sets, and other devices generating radio frequencies.

Setting Up the AM Antenna (Fig. [6])

- Insert the clip on the bottom of the antenna into the groove on the leg.
- To permanently fix the antenna, screw the leg to a wall or something similar before assembling (fixing the antenna in the direction that gives the best reception).
- Place the antenna on a level surface and rotate it to locate the orientation that yields the best reception.

① lead wire ② leg

External AM antenna (Fig. [7])

① Indoor AM antenna

Provide a vinyl-coated wire (5 to 6 meters long). Secure one end to the AM terminal and the other end to a wall or other high location.

② Outdoor AM antenna

If reception is still poor even when a lead antenna has been fully extended indoors, stretch out a vinyl-coated wire and secure it outdoors.

NOTE:

Do not detach the AM loop antenna when using the external AM antenna.

FM/AM CHANNEL SWITCH

Adjustment is only necessary when there is a CHANNEL STEP switch at the rear panel.

The CHANNEL STEP switch is located on the rear panel of the digital synthesizer tuner. Before the tuner leaves the factory, this switch is set to the channel step standard of the area where the tuner is sold. Depending on the position of this switch, each time TUNING switch is pressed, the frequency display changes by the following amount:

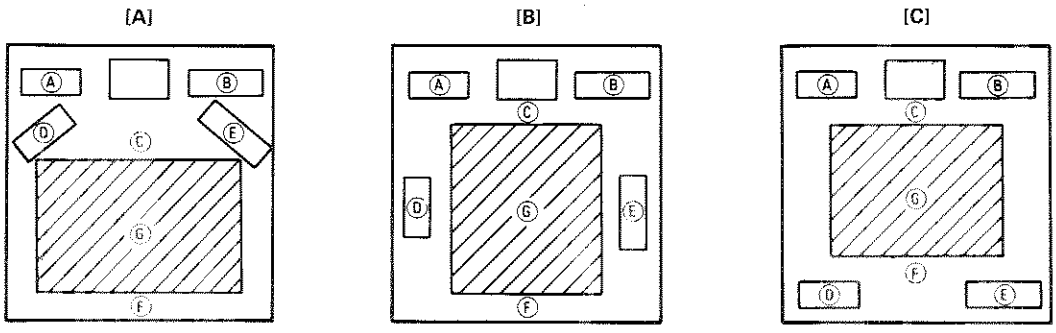
[100 kHz/10 kHz] position
For areas with channel step of 100 kHz for FM and 10 kHz for AM.
[50 kHz/9 kHz] position
For areas with channel step of 50 kHz for FM and 9 kHz for AM.

NOTE:
If the switch is set to the wrong position, correct tuning may not be possible.

Consult your dealer if you are not sure about the radio channel step standard in your area.

SURROUND SYSTEM

8



What is surround sound?

Normally with ordinary stereo, sound comes only from speakers in front of the listener; however, in a concert hall or theater, sound reflected from the walls and ceiling reaches the listener from all directions. This is what accounts for the feeling of ambience or spaciousness of a live performance.
Surround sound works to reproduce these effects to produce fuller, more "live" sound.

STEREO WIDE

When the surround speakers are not connected, the stereo wide function may be activated. This function enhances the stereo effect. Note however, that it does not operate in the case of a monaural source.

Speaker System Placement Examples (Fig. 8)

The sound effects obtained in a surround system depend on speaker placement. Experiment with various arrangements to find the one most suited to your tastes.
Placing the speakers slightly higher than ear level contributes to sound quality.

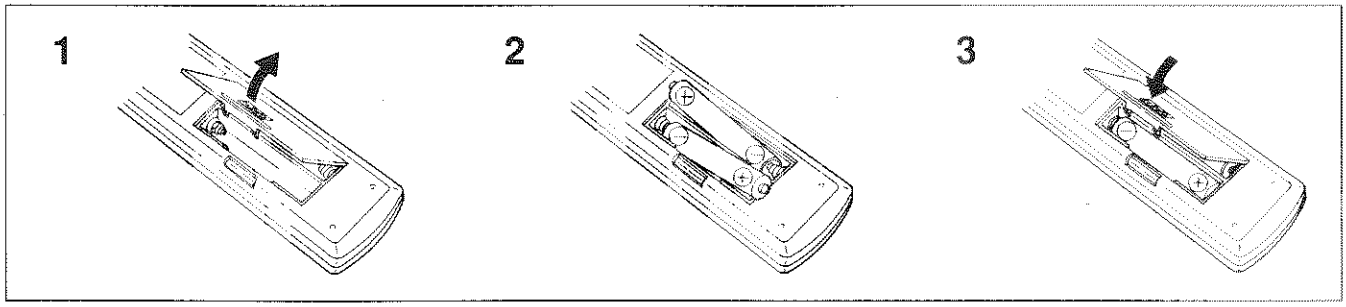
[Case A]
Good sound dispersion; recommended for movies, etc.

[Case B]
Sound appears to come from directly in front of listener. Good for listening to music recordings.

[Case C]
Offers most varied effects; good for watching sports programs or listening to live recordings.

Ⓐ Front speaker left
Ⓑ Front speaker right
Ⓒ Front
Ⓓ Surround speaker left
Ⓔ Surround speaker right
Ⓕ Rear
Ⓖ Listening area

LOADING BATTERIES INTO REMOTE CONTROL UNIT



1. Open the rear cover.
2. Install size "AAA" (IEC R03/UM-4) batteries, correctly matching polarity.
3. Close the cover.

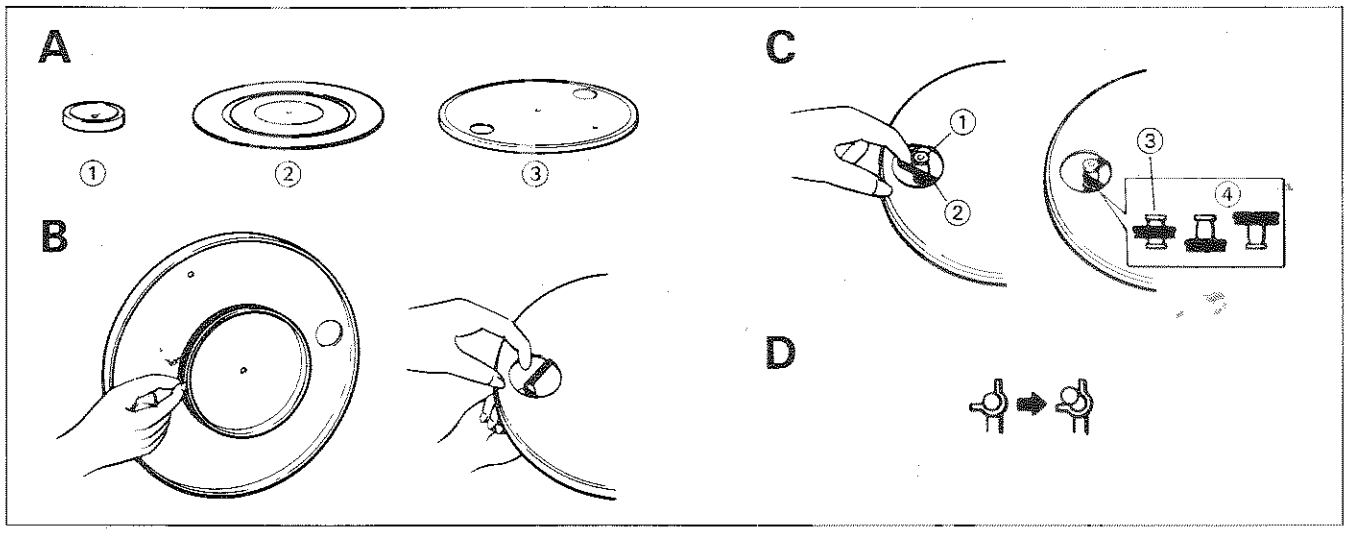
Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:

A:
Always insert batteries into the battery compartment, correctly matching the positive ⊕ and negative ⊖ polarities, as indicated inside the compartment.

B:
Never mix new and used batteries.

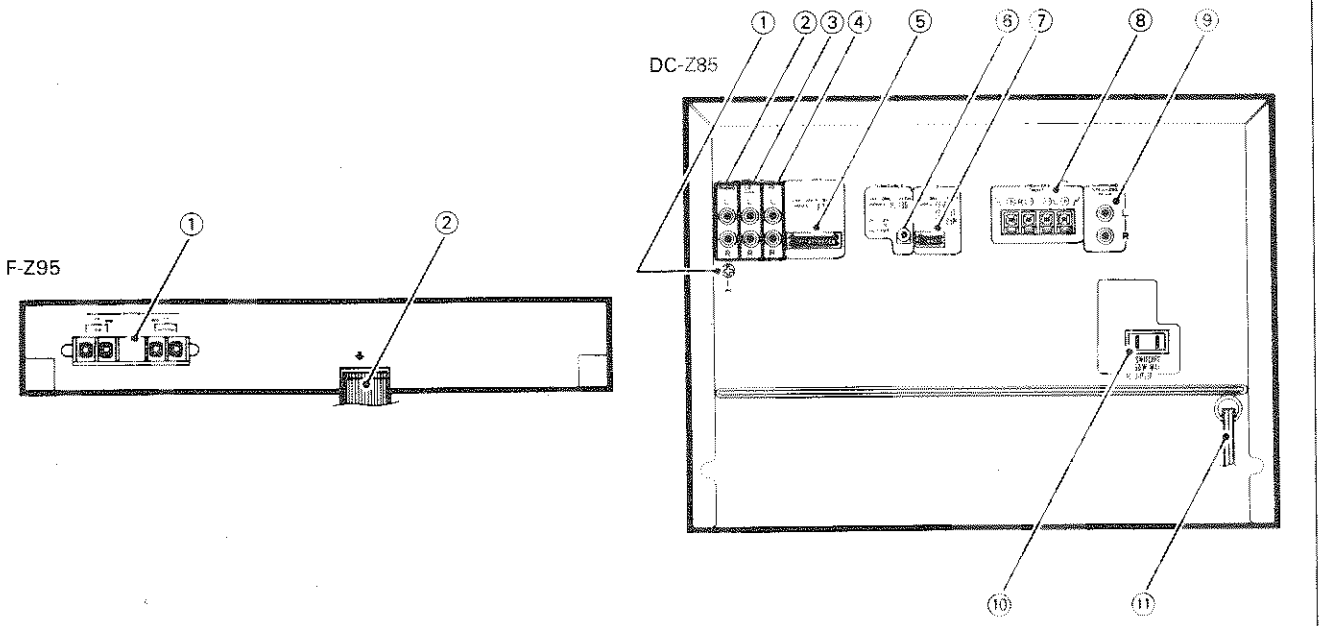
C:
Batteries of the same size may have different voltages, depending on their type. Do not mix different types of batteries.

PL-Z85 TURNTABLE SET UP



1. **Check the parts (See Fig. A).**
   ① EP adaptor (You will find this taped on the cabinet.)
   ② Platter mat
   ③ Platter
2. **Pinch belt on inner rim between thumb and forefinger (See Fig. B).**
3. **Slip belt over finger and pull out, inserting finger in hole.**
4. **Insert finger from top of platter and transfer belt to forefinger.**
5. **Lower platter onto spindle.**
6. **Release belt onto pulley (See Fig. C).**
   ① Pulley
   ② Belt
   ③ Correct
   ④ Incorrect
7. **Place platter mat on platter (with "PIONEER" side up).**
8. **Remove the vinyl band holding the tonearm.**
9. **Remove the stylus cover.**
10. **Remove the tonearm from the arm rest (See Fig. D).**

PANEL FACILITIES



REAR PANEL FACILITIES

Tuner: F-Z95

① FM/AM ANTENNA terminals

Antennas must be connected to these terminals: otherwise you will not be able to receive stations. See page 4 for details on ANTENNA CONNECTIONS.

② TUNER input/output cord

Connect to the TUNER jack of the cassette deck amplifier.

Cassette deck amplifier: DC-Z85

① Ground terminal (GND)

Connect the ground cord of the turntable here (except for PL-Z85).

② PHONO input jacks

Connect the audio cord of the turntable to these jacks.

③ LD/VCR jacks

Connect to audio output jacks of LD player or VCR, etc.

④ CD input jacks

Connect to output jacks of a CD player.

⑤ TUNER jacks

Connect the tuner input/output cord here.

⑥ TURNTABLE (DC 12 V OUTPUT) jack

This jack supplies power to the turntable PL-Z85.
Connect the power supply cord of the turntable to this jack.

⑦ CD jacks

Connect to a compact disc player PD-Z65, PD-Z75T or PD-Z85M flat cable.

⑧ SPEAKERS terminals

L: Connect the left speaker system as seen from the listening position.
R: Connect the right speaker system as seen from the listening position.

NOTE:
Connect a speaker system having a nominal impedance ranging from 6 Ω to 16 Ω.

⑨ SURROUND SPEAKERS jacks

Connect the surround speaker systems.

NOTE:
Connect a speaker system having a nominal impedance of 16 Ω or more.

⑩ AC OUTLET (SWITCHED 50 W MAX)

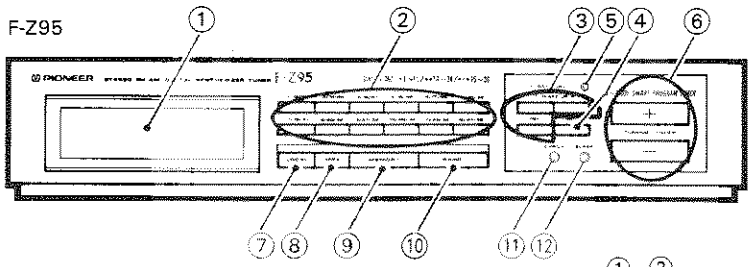
Power supplied through this outlet is turned on and off by the cassette deck amplifier's POWER switch. Total electrical power consumption of connected equipment should not exceed 50 W.

NOTE:
Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLET in order to avoid overheating or fire hazard.
This can cause the cassette deck amplifier to malfunction.

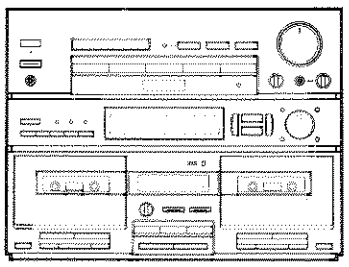
⑪ Power cord

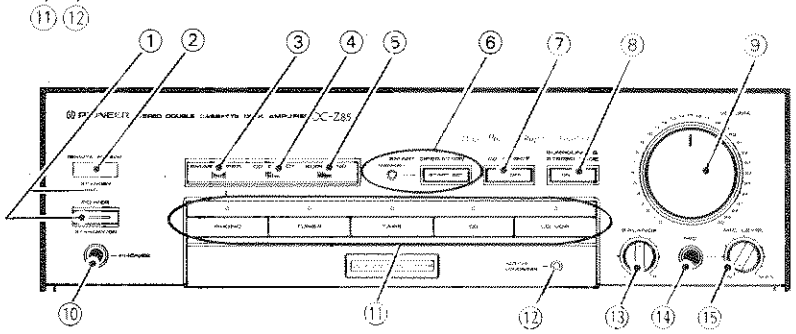
Connect this to the household electrical outlet.

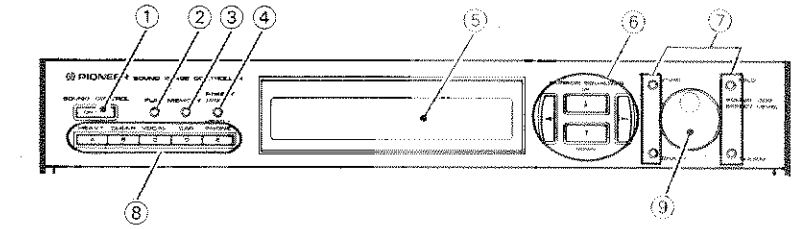
F-Z95

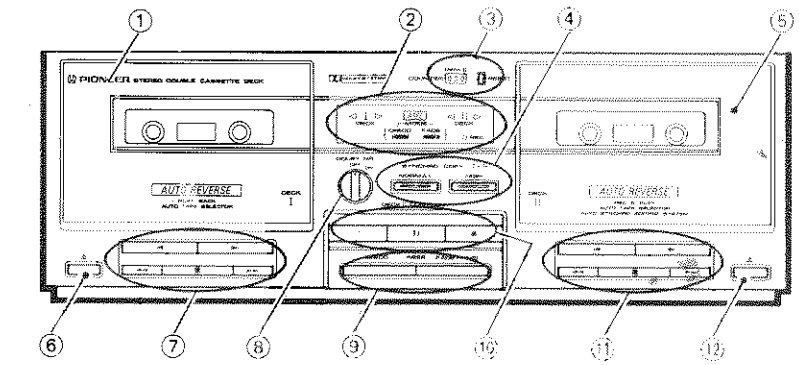


DC-Z85

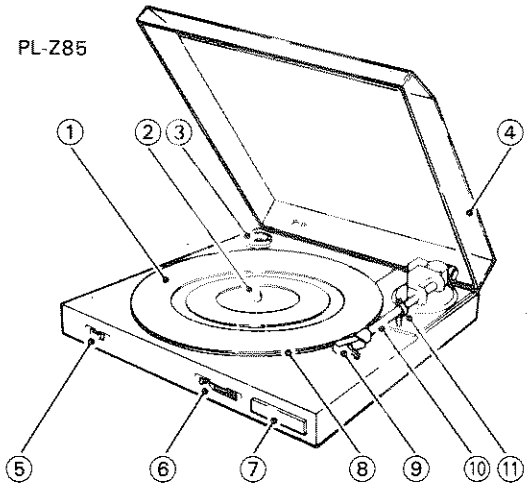


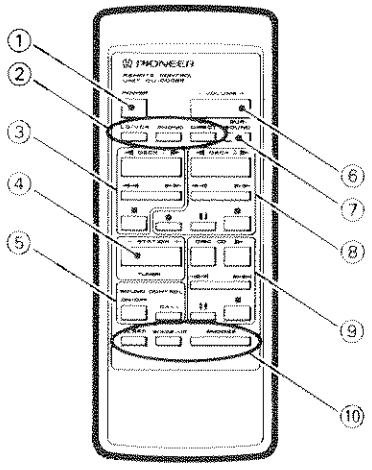






PL-Z85



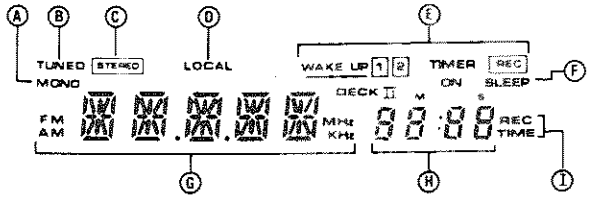


FRONT PANEL FACILITIES

Tuner: F-Z95

① Display section

Shows current time, received frequency, contents of timer settings, etc.



Ⓐ MONO indicator
Lights when the MPX button is set to ON. When this indicator is lit, FM stereo broadcasts are reproduced monaurally.

Ⓑ TUNED indicator
Lights when a broadcast is received and tuned in well.

Ⓒ STEREO indicator
Lights when an FM stereo broadcast is received (MPX button set to OFF).

Ⓓ LOCAL indicator
Lights when the LOCAL button is set to ON.

Ⓔ Timer indicators
These show various timer setting.

Ⓕ SLEEP indicator
Indicates that the sleep timer is activated.

Ⓖ Frequency display
Shows received broadcast frequency. Also gives scrolling display of main function status.
FM and MHz light: FM reception.
AM and kHz light: AM reception.

Ⓗ Time display
This shows the present time and during recording, it shows the elapsed recording time. When you listen to a broadcast, the STATION CALL number is displayed.

Ⓘ Deck II REC TIME indicator
Lights when deck II is recording.

NOTE:
The elapsed recording time might not be displayed due to noise from the power supply caused by improper timing when connecting the power cord. In such case, disconnect the power cord and connect it again.

② STATION CALL buttons

Used for memorizing and recalling memorized stations.

③ SET buttons

Used for current time, timer playback, and timer recording setting.

④ Timer selector buttons

[WAKE-UP 1,2]
Used for timer playback setting.
[REC]
Used for timer recording setting.

⑤ CLOCK ADJ button

Used for starting the clock adjustment.

⑥ TUNING/TIMER (−, +) buttons

[During tuning]
Used for locating stations.
Use "−" button for lower, and "+" button for higher frequencies.

[During time and timer setting]
Used for adjusting the clock, timer settings and its related adjustments.

⑦ LOCAL button

Use this if the broadcast signal is too strong, causing noise and distortion. The atttenuator reduces the strength of the signal, reducing noise and distortion.

⑧ MPX (FM MONO) button

Turn on when there is much noise during reception of FM stereo broadcasts. The reproduced sound will become monaural but noise will be reduced.

⑨ MEMORY button

Used for memorizing stations. When the button is pressed, the frequency display will flash. To memorize the frequency of any station, press a station call button while the frequency display flashes.

⑩ BAND selector button

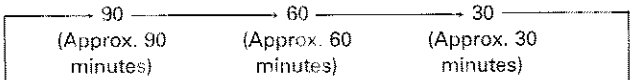
Each time this button is pressed, FM or AM reception is selected alternately.

⑪ CHECK button

Used for confirming timer settings, after setting for timer playback or timer recording.

⑫ SLEEP button

Sets the sleep timer.
Each time you press this button, the setting changes as shown here.
The current setting is shown on the tuner display.
Power turns off when your set time has elapsed.



If you press the SLEEP button during recording, AUTO is displayed, and power is switched off at the end of recording.

Cassette deck amplifier: DC-Z85

- This unit has an automatic tape type selector.
- Tapes can be played back on deck I; tapes can be played back and recorded on deck II.
- Sound can be recorded as adjusted by the sound image controller.
- Use a normal or chrome position tape.

Amplifier section

① POWER STANDBY/ON switch /STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readinss.
When the STANDBY indicator is on, the unit is in STANDBY.

② REMOTE SENSOR window

③ SMART OPER. (OPERATION) indicator

This lights when smart operation is on.
It goes out after about 30 seconds.

④ CD DIRECT indicator

This lights when CD DIRECT is on.

⑤ SURROUND indicator

This lights when SURROUND & STEREO WIDE is on.

⑥ SMART OPERATION buttons

[START/SET]
Use when programming memory and operating SMART OPERATION.
[MEMORY]
Use when programming SMART OPERATION into memory.

⑦ CD DIRECT button

Press this button to listen to a CD without passing the signal through sound quality adjustment circuits.

⑧ SURROUND & STEREO WIDE button

By turning this switch ON, you can enjoy surround reproduction when rear speakers are used.
By turning this switch ON, you can enjoy STEREO WIDE reproduction with greater left-right spread when rear speakers are not used.

NOTE:

- *In the case of monaural source, SURROUND & STEREO WIDE effects cannot be obtained.*
- *SURROUND & STEREO WIDE functions do not operate if CD DIRECT is on.*

⑨ VOLUME control

⑩ PHONES (Headphones) jack

For stereo headphones.

NOTE:
There is no output from the speakers when headphones are plugged into PHONES jack.

⑪ Input selector buttons

[PHONO]
Press to play records on a turntable connected to the PHONO jacks.
[TUNER]
Press to listen to radio broadcast.
[TAPE]
Press to listen to cassette tape.
[CD]
Press to listen to a CD player connected to the CD jacks.
[LD/VCR]
Press for playback on an LD player or VCR connected to the LD/VCR jacks.

⑫ ACTIVE LOUDNESS button

This switches the active loudness function ON and OFF. Depending on the volume setting on the amplifier, this function automatically boosts bass and treble response.

⑬ BALANCE control

Used for changing the balance between left and right channels. Usually set this control to the center position.

⑭ MIC (Microphone) jack

This is a standard jack for connecting a microphone.

⑮ MIC LEVEL control

Used for adjusting the volume of microphone.

Sound image controller section

① SOUND CONTROL ON/OFF button

This switches the sound image controller on/off. When it's on, the SOUND CONTROL indicator in the display section lights.
During playback with CD DIRECT on, sound control is not possible.

② FLAT button

Press to reset the equalizer to flat response (no equalization).

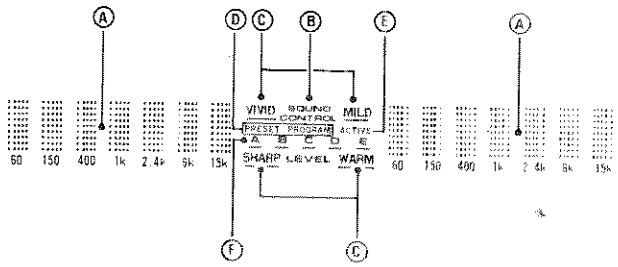
③ MEMORY button

Use this to program your desired equalization settings into the memory recall buttons (A to E).

④ PRESET/PGM (PROGRAM) button

Use to switch between recall of PRESET memory settings and your own original memory settings (PROGRAM) with the memory recall buttons.
The memory being recalled is indicated by the lit indicator in the display section.

⑤ Display section



Ⓐ Visual display of spectrum analyzer and graphic equalizer.
Ⓑ This lights when the sound control is on.
Ⓒ This indicates the recalled image effect. A lit bar under the letters indicates the one selected.
Ⓓ This indicates the memory (PRESET and PROGRAM) that can be recalled with the memory recall buttons.
Ⓔ This lights when active loudness is on.
Ⓕ Display of the memory being recalled with the memory recall buttons. A lit bar under A to E indicates the one selected.

⑥ CURSOR EQUALIZER buttons

Use to adjust graphic equalizer settings.
[◄, ►]: Use these to change the frequency range to be adjusted.
[▲ (UP), ▼ (DOWN)]: Use these to adjust the degree of equalization.

⑦ Image effect buttons

These buttons let you select the effect mode most suitable for a particular genre of music. Adjust the effect level with the SOUND JOG.

⑧ Memory recall buttons

Use to recall preset equalization settings. Also use to program into memory and recall desired sound settings.

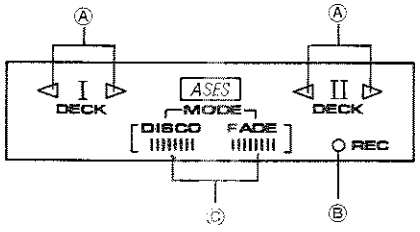
⑨ SOUND JOG

Use to adjust image effect level.

Cassette Deck Section

① Deck I cassette door

② Operation indicators



Ⓐ **Direction (◁ , ▷):** Indicates direction of tape travel during recording or playback. Flashes slowly in Pause mode. Flashes rapidly during Music Search (MS).
Ⓑ **REC:** Lights when recording. It flashes during tape copying.
Ⓒ **ASES MODE**
FADE: Fade edit in progress.
DISCO: Disco edit in progress.

③ DECK II COUNTER and RESET button

Press the RESET button to reset the tape counter display to 000.

④ SYNCHRO COPY I ► II buttons

Used for tape copying.
NORMAL: Copying from the Deck I tape to the Deck II tape at normal recording/playback speed.
HIGH: Copying at about twice normal tape speed. (Copies can be made in about half the NORMAL time.)

⑤ Deck II cassette door

⑥ Deck I EJECT button

⑦ Deck I operation buttons

► **(PLAY: FWD)**..... For playing back a tape in the forward mode.
◄ **(PLAY: REV)** ..... For playing back a tape in the reverse mode.
■ **(STOP)**..... For stopping the tape.
►► **(FAST)**..... Fast forward in forward mode, rewind in reverse mode.
Music search (MS) starts if this is pressed during playback.
◄◄ **(FAST)**..... Rewind in forward mode, fast forward in reverse mode.
Music search (MS) starts if this is pressed during playback.

⑧ DOLBY* NR switch

Set this switch to the ON position to activate the DOLBY NR system.
- Tapes recorded using Dolby noise reduction should always be played back with the noise reduction system on. Sound quality will be adversely affected if played back with the system off, or if tapes recorded using a different noise reduction system are played back with the Dolby NR system on.
- It is recommended that tapes recorded with Dolby B type NR be so marked on the label. This will help prevent incorrect setting of the noise reduction switch during playback.

*
Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

⑨ A.S.E.S. button

Used for automatically recording a CD on cassette tape.
FADE (FINE): The sound fades out at the end of the tape.
DISCO: This cross-fades between songs during recording.
NOTE:
- *FINE is the mode when performing CD player COMPU PGM EDIT (Computer Allocated Program Editing).*
- *The FADE (FINE) modes provide a blank space of about five seconds between songs.*

⑩ DECK II CONTROL buttons

● **(REC)**..... To set to recording standby mode. The REC indicator lights and the direction indicators (◄ and ►) flash. Recording begins when you press the PLAY button (◄ or ►).
❚❚ **(PAUSE)**..... Temporarily stops tape travel. Cancels pause mode when pressed again or press the PLAY button.
○ **(MUTE)** ..... Used for creating a blank space between songs.

⑪ Deck II operation buttons

Same as Deck I operation buttons ⑦ .

⑫ Deck II EJECT button

Turntable: PL-Z85

① Platter mat

② Platter spindle

③ EP adaptor

Place over the spindle to play 45-rpm singles.

④ Dust cover

⑤ SPEED switch

Set this switch in accordance with the speed of the record.
33: For 33-1/3 rpm records.
45: For 45 rpm records.

⑥ ARM-ELEVATION switch

- To suspend record play temporarily.
- For changing the tracks during actual play.

[UP]: The tonearm rises (the stylus moves away from the record.)
[DOWN]: The tonearm descends (the stylus is lowered onto the record.)

⑦ STOP (■) button

Press this button to stop play.

⑧ Platter

⑨ Cartridge

⑩ Tonearm

⑪ Arm rest

Remote control unit

① POWER button

② Function buttons

LD/VCR..... Sets function to LD/VCR.
PHONO.....Sets function to PHONO.
CD DIRECT.....Sets function to CD DIRECT.

③ DECK I operation buttons: Same as Deck I operation buttons on the cassette deck amplifier.

④ TUNER STATION button

• Before operation, memorize broadcast stations in the STATION CALL buttons.
+ ..... Stations change in order in the upward direction
– ..... Stations change in order in the downward direction.

⑤ SOUND CONTROL operation buttons

ON/OFF: Turns the sound image controller on and off.
CALL: Recalls the preset equalizing curves (PRESET) and memorized sound control (PROGRAM) in sequence.

⑥ VOLUME + (UP)/– (DOWN) button

When pressed, VOLUME on the amplifier is actually moved by a motor.

⑦ SURROUND button

Turns SURROUND & STEREO WIDE on and off.

⑧ Deck II operation button: Same as Deck II operation buttons and DECK II CONTROL buttons on the cassette deck amplifier (except MUTE).

⑨ CD operation buttons

Perform the connections so that the CD player is operated by the remote control unit.
►.....Play
DISC.....DISC selection
■.....Stop
❚❚.....Pause
⏮, ⏭.....Track search

NOTE:
Note that the DISC selector button on the remote control unit may not operate, depending on the CD player used.

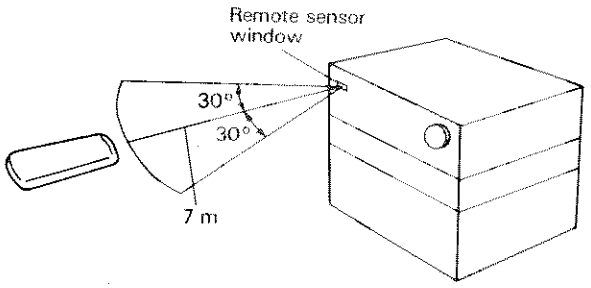
⑩ Timer operation buttons

SLEEP: Sets the sleep timer.
WAKE-UP: Timer playback setting/cancellation can be performed when the timer playback time has been set. This is shown in the tuner display section.
SNOOZE: Turns off power if pressed after timer playback begins. Timer playback begins again approx. 5 minutes later.

The amplifier input selector automatically switches to the music source being operated when you press the CD playback (►), cassette deck playback (◄, ►), or tuner station controls.

NOTE:
It is not possible to operate the CD player with the remote control unless the control cord is connected.

Range of remote control



When the remote control unit is pointed at the remote sensor window on the amplifier section and any of its buttons is pressed, the tuner and other components can be operated by remote control.
Distance: Within a range of approx. 7 meters (23 feet) from the remote sensor window.
Angle: Within approx. 30 degrees from the center of the remote sensor window.
Remote control will not be possible if there is an obstacle between the remote control unit itself and the remote sensor window.
Performance of the remote control unit is adversely affected by strong fluorescent light. Keep such lights away, especially from the sensor window.

HOW TO HANDLE CASSETTE TAPES

Bear in mind the following points before loading cassette tapes.

Is the tape loose, or is some of the tape outside the cassette?
If some of the tape is projecting outside the cassette shell or if it is loose, it may not feed between the capstan and pinch roller. This will prevent the tape from being transported or damage the tape itself. In cases like these, insert a pencil into the reel hole and take up the slack (Fig. A). Some cassette tapes come with a plastic or thick paper stopper which prevents tape slack. Remove this stopper when loading the tape and replace it after having used the cassette.

What are the accidental erasure prevention tabs for?
A cassette is provided with these tabs so that important recordings will not be erased accidentally. When the tab (Fig. B) on the cassette shell is broken out with the tip of a screwdriver, it will not be possible to activate the recording function even by pressing the recording (REC) button, so valuable recordings will not be erased in error.
To re-record on a cassette whose tabs have been broken out, simply stick a piece of doubled adhesive tape over the tab areas, as shown in Fig. C.

NOTE:
The accidental erasure prevention tabs are located at the top left on both sides A and B (1 and 2), so that material on each side can be prevented from being erased in error.

Tips on using cassette tapes

- Leader tape (which does not allow sound to be recorded over it) is provided at the beginning of a cassette tape. Start recording after allowing the tape to run for approx. 5 seconds so that the leader tape clears the recording head.
- Do not leave a cassette tape exposed to the environment. Store the cassette in its case so that dust and dirt do not adhere to the tape after use, and so that the tape is prevented from becoming slack. Choose a location which is not exposed to the effects of magnetism, dust, dirt and oil for storing the tapes.
- Because C-120 tapes are so thin, they easily jam in the pinch roller and capstan, and they are susceptible to other trouble such as irregular winding. Try not to use them with this unit.
  Use tapes of 90 minutes or less.

Fig.A

How to take up tape slack.

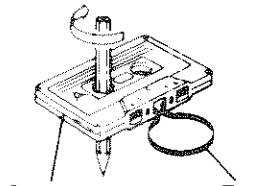


Fig.B

How to prevent already recorded tapes from being erased.

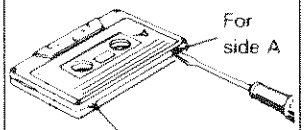
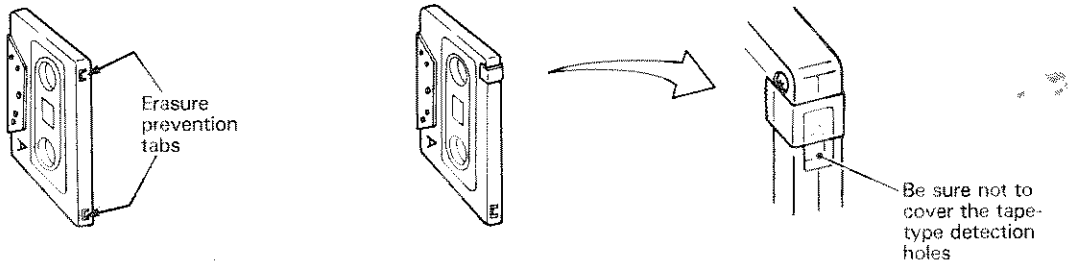
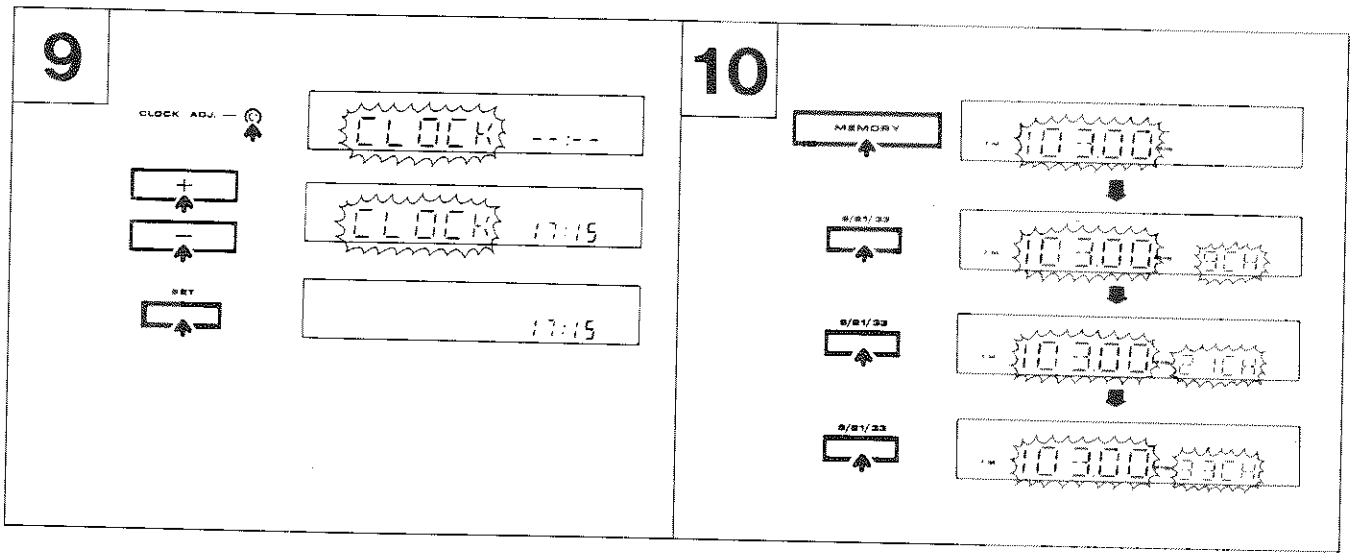


Fig. C

When you want to record again on a cassette with broken erasure prevention tabs, cover the tab sections with a double layer of cellotape or other tape.



With TYPE II (HIGH/CrO_2) tape, be sure not to cover the tape-type detection holes. If they are covered, the auto tape selector function will not operate correctly.



SETTING THE CLOCK (Tuner operation)

[Example] Setting the time to 17:15. (See Fig. [9])

1. **Press CLOCK ADJ button.**
2. **Use TUNING/TIMER "—" and "+" button to set the hour and minutes.**
3. **Press SET button when "00" seconds of that minute are reached for precise adjustment.**

- After connecting to an AC outlet, be sure to set the present time. Timer playback and timer recording are not possible unless the time has been set.
- The time indication will appear as " --:--" if the AC power cord is unplugged. Be sure to set the time again after power is resumed.

PREPARATION

Press POWER switch of the cassette deck amplifier.
Select an input selector button.

To listen to a CD without passing through the various frequency-adjusting circuits, press the CD DIRECT button. The CD DIRECT indicator lights.

Auto Function
When DC-Z85, F-Z95 and PD-Z65 (PD-Z75T/PD-Z85M) are used together.

This model is equipped with "auto function" operation, so when the switch for playing CD, tape, or tuner is pressed, the amplifier's function switches automatically.
Use the input selector switches for PHONO and LD/VCR source selection since Auto Function is not effective for these.

NOTE:

- *When the CD DIRECT button is on, you cannot use the sound image controller, or SURROUND & STEREO WIDE functions.*
- *Input selectors can not be switched during recording. (Auto function does not operate either.)*

TUNING INTO STATIONS (Tuner operation)

1. **Select the desired broadcasting band using BAND selector button.**
2. **Press "+" or "–" TUNING/TIMER button for higher or lower frequencies.**

[Auto tuning]
Press TUNING/TIMER "—" or "+" button until the frequency starts to change, then release it.
The tuner will automatically search for a broadcasting station, and stop when one is found, and the TUNED indicator lights up. To search for another station, press again.
- To interrupt auto tuning, press TUNING/TIMER button again.

NOTE:
When auto tuning is in use, reception may not be possible for distant stations or when signals are weak. At these times manual tuning is recommended.

[Manual tuning]
Press TUNING/TIMER "—" or "+" button and release quickly.
The tuning frequency will change by one step each time the button is pressed. Press as many times as necessary to tune in the desired station. The TUNED indicator lights up when the station is tuned in best.
- If you keep the TUNING/TIMER button pressed after the frequency has begun to change, the reception frequency changes continuously, and stops when the button is released.

3. **Adjust VOLUME control on the amplifier.**

FM stereo/monaural broadcast reception

When the MPX button is in the off position (MONO indicator is out), the STEREO indicator lights during reception of an FM stereo broadcast.
If the FM stereo broadcast signal is weak, with a lot of noise, press the MPX button and the MONO indicator lights. Reception will be monaural, but noise will be reduced.

LOCAL function

If the broadcast station is very near, the FM broadcast signal may be too strong, resulting in noise and distortion. In this case, press LOCAL button. LOCAL indicator lights.

MEMORIZING STATIONS (Tuner operation)

(See Fig. 10)

Presetting

Up to 36 FM/AM stations can be memorized at random. Press a STATION CALL button once for Mode 1 (1 — 12), twice for Mode 2 (13 — 24) and three times for Mode 3 (25 — 36).

1. **Tune in desired station.**
   (If the station is FM, then the current MPX on/off and LOCAL on/off settings are included in the memory.)
2. **Press MEMORY button.**
   • The display will flash (approx. 5 seconds).
3. **Press STATION CALL button.**
   • While the display is flashing, press a STATION CALL button in which you wish to memorize the station.
   • One press selects the 1 — 12 (Mode 1), two presses 13 — 24 (Mode 2), and three presses 25 — 36 (Mode 3).

   [Example] If you press button "9/21/33"
   Once ..... 9 CH
   Twice ..... 21 CH
   Three times ..... 33 CH

NOTE:
If you press the same STATION CALL button again within two seconds, the station number changes from Mode 1 to Mode 2 to Mode 3 in sequence.

Mode 1 (1—12) → Mode 2 (13—24) → Mode 3 (25—36)
Press within approx. 2 sec.

• *After you press the STATION CALL button, the display will flash for approx. 2 seconds, then the station will be memorized. If you press another button while the display is flashing, the station will not be memorized.*

RECEPTION USING PRESET TUNING (Tuner operation)

Press STATION CALL button into which the desired station is memorized.

• Press once for Mode 1 stations, twice for Mode 2 and three times for Mode 3.

NOTE:
The contents of the STATION CALL buttons will be preserved for several days, even if the cassette deck amplifier's power cord is unplugged. If a memorized station has been erased, memorize it again.

Last station memory

The last received AM and FM stations remain stored despite input selector and/or POWER switching. To recall, use BAND selector button.

TAPE PLAY (Cassette deck operation)

Tapes may be played back in deck I or deck II but not in both decks at the same time.

1. **Press EJECT button, and load a recorded tape.**
2. **Set the DOLBY NR switch to the same position used for recording.**
3. **Press PLAY button (► or ◄).**
   Press PLAY button of the loaded deck.
4. **Adjust VOLUME control on the amplifier.**
5. **To stop playback, press STOP button (■).**

Auto Stop Mechanism

• When a tape is played back on Deck I or Deck II, play automatically stops after both sides of the tape have been played six times.
• If tapes are loaded in both Deck I and Deck II, after the tape in Deck I has finished playing in the reverse direction (◄), playback begins in the forward direction (►) on Deck II (Relay Play). Playback automatically stops after the tape in Deck II finishes playing in the reverse direction (◄).
• When recording, recording automatically stops when the tape finishes recording in the reverse direction (◄).
• Load both Deck I and Deck II with tapes, start playback (►) on Deck II, and playback will stop after the tape finishes playing in both directions.

NOTE:
When the PLAY button of one deck is pressed while the other deck is in playback mode, the former stops and the latter starts playback.

MUSIC SEARCH (Cassette deck operation)

You can perform music search during playback by carrying out the following:

• **To listen to the following program, press FAST button of the same direction as playback.**
• **To listen to the current program again, press FAST button of the opposite direction to playback.**

During Music Search the indicator for tape travel direction flashes. When doing music search, do not operate the other deck. Doing so may affect blank interval detection function. When the unrecorded portion between the two programs is located playback resumes.

NOTE:
Performing Music Search on the following types of tape may not be possible. This is not a unit malfunction, however.
• *A tape whose unrecorded portions between tracks are less than 4 seconds long.*
• *A tape with high noise level between tracks.*
• *A tape with low level or silent passages of several seconds in the same tracks, such as classical music.*
• *A tape, such as a conversation tape where sound is intermittent.*

RECORDING ONTO A CASSETTE TAPE (Cassette deck operation)

Material can be recorded on Deck II only. Recording is not possible on Deck I. You can make a recording of source which has passed through the sound image controller.

1. **Press EJECT button, and load the tape for recording into deck II.**
   - Check to see that the accidental erasure prevention tabs are not broken off.
   - Make sure that there is no tape slack.
2. **Set DOLBY NR switch to the desired position.**
   - A tape which has been recorded using the DOLBY NR system must be played back with the same system.
3. **Use the input selector button on the amplifier to select the recording source.**

Program source	Selected indicator	Operation
Record	PHONO	Operate the turntable
Radio broadcast	TUNER	Tune into a broadcast
Tape	TAPE	Play a tape in deck I
Compact disc	CD	Play a compact disc
Equipment which is connected to LD/VCR jacks	LD/VCR	Operate the equipment connected to LD/VCR jacks

4. **Create your own original sound with the sound image controller.**
5. **Press REC button (●).**
   - The REC indicator lights.
   - The direction indicator flashes.
6. **Press the appropriate PLAY button (► or ◄).**
   - When you start recording with the ► button, at the end of the tape, recording automatically continues in the ◄ direction (both-side recording).
   - When you start recording with the ◄ button, recording stops at the end of the tape.
7. **Play the recording source.**
8. **To stop recording, press STOP button (■).**

Auto reverse function

This unit uses rotary type recording and playback heads, and the same heads are used in both forward and reverse directions. Tape-end detection is employed to activate auto reverse operation which takes approx. 2 seconds after the tape is taken up.

NOTE:
A leader tape having a length equivalent to approx. 5 seconds is attached to an ordinary cassette tape. This means that for two-way travel of the leader tape there will be a break of approx. 12 seconds in the sound. Be very careful of this, particularly when making a two-way recording.

Pausing and restarting recording

1. **Press PAUSE button (❚❚).**
   - Recording will be suspended.
2. **To restart recording, press PAUSE (❚❚) or PLAY button.**

Recording muting

Use this function to create the 4-second blanks required for the music search operation.

- Press MUTE (⊘) button during recording, and the unit will stop recording sound on the tape for about 4 seconds and will enter the recording pause mode.
- To create a blank more than 4 seconds long, hold the button down for the desired time. The unit will enter the recording pause mode when you release the button.
- To resume recording, press PAUSE (❚❚) button.

DOLBY NR SYSTEMS

The Dolby NR Systems is designed to reduce high-frequency noise (tape hiss) during playback. The level of low-volume, high-frequency sounds is increased during recording, and decreased by the same amount during playback to restore the original level. In this process the original high-frequency noise (most easily perceived by the human ear) is attenuated notably.
Dolby NR reduces high-frequency tape noise, widening the dynamic range.
For playback always use the same Dolby NR setting that was used for recording.

NOTE:
Avoid playing back tapes recorded using the Dolby NR Systems with DOLBY NR OFF, or tapes recorded without Dolby NR Systems with DOLBY NR ON, since this does not allow faithful reproduction of the original sound.

RECORD PLAY (Turntable PL-Z85)

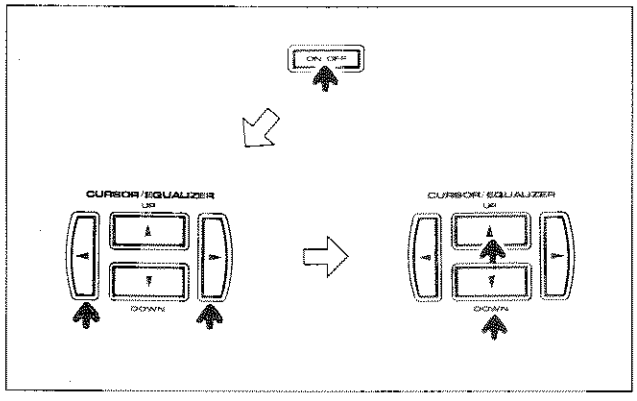
1. **Set input selector button on the amplifier to PHONO.**
2. **Place record on the platter mat.**
3. **Remove the stylus cover and release the tonearm from the arm rest.**
4. **Set SPEED switch.**
5. **Set ARM-ELEVATION switch to UP position.**
6. **Move the tonearm by hand to the desired position over the record.**
7. **Set ARM-ELEVATION switch to DOWN position.**
   - The tonearm descends onto the record and playback starts.
8. **Adjust the volume with VOLUME control on the amplifier.**
9. **To stop the player while a record is being played, press STOP button.**

PLAYING THE COMPONENTS CONNECTED TO THE CD OR LD/VCR JACKS

1. **Set input selector button on the amplifier according to the program source to be played.**
   When used in combination with Pioneer PD-Z65, PD-Z75T or PD-Z85M CD player, the input selector automatically switches to CD when CD playback starts.
2. **Play the component to be used.**

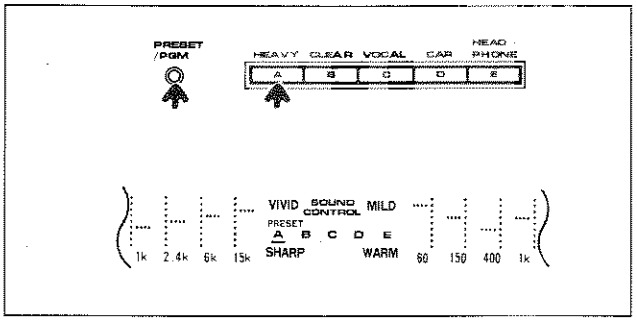
SOUND CONTROL

Adjusting sound quality with the graphic equalizer



1. **Press the SOUND CONTROL ON/OFF button to switch on.**
   • The SOUND CONTROL indicator in the display section lights.
2. **Select a frequency with the ◄, ► CURSOR EQUALIZER buttons.**
   • With the ◄, ► buttons, move the "----" so that it is lit at the location of the frequency you want to adjust.
3. **Adjust the level of equalization with the CURSOR EQUALIZER ▲ (UP), ▼ (DOWN) buttons.**
   • Press the ▲ button to increase the level of equalization. Press the ▼ button to decrease the level of equalization.
4. **Repeat procedures 2 and 3 to create your desired equalization pattern.**

Selecting a preset equalization pattern



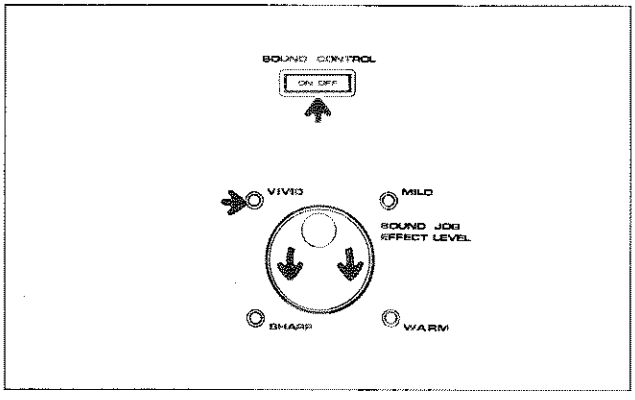
You can enjoy recalling the following five preset equalization patterns.

- **HEAVY**..... This pattern boosts high and low frequencies, for a louder, more powerful sound. It's ideal for rock and pop music, and live performances.
- **CLEAR**..... Ideal for fusion and electronic music, this pattern provides clear middles and highs.
- **VOCAL** ..... When listening to opera or musicals, this preset boosts the vocals so you can hear them clearly.
- **CAR**..... This is a good equalization pattern to use when recording tapes for use on your car stereo.
- **HEADPHONE** .. This is a good equalization pattern to use when recording tape to listen to on headphones.

Use the CAR and HEADPHONE equalization patterns when recording tapes.

1. **Press the PRESET/PGM button to select PRESET.**
   • The PRESET indicator in the display section lights.
2. **Select your desired equalization pattern with a memory recall button.**
   • The bar under the pressed memory recall button's indicator (A to E) lights.

IMAGE EFFECT CONTROL



Select "image effect" and change the effect level with the SOUND JOG until you have created your desired sound.
The following four "image effects" are available.

SHARP
VIVID
WARM
MILD

1. **Press the SOUND CONTROL ON/OFF button to switch on.**
   • The SOUND CONTROL indicator in the display section lights.
2. **Recall a preset equalization pattern or create your own equalization pattern with the graphic equalizer.**
3. **Select your desired image effect.**
   • The bar under the selected image effect's indicator lights.
4. **Adjust the effect level with the SOUND JOG.**
   • Turn in a clockwise direction to increase the effect level, and in a counterclockwise direction to reduce it.

ACTIVE LOUDNESS

The effect graphic equalizer pattern changes automatically depending on the amplifier volume level setting. The lower the volume level, the more the bass and treble are boosted. If the volume level is raised, the graphic equalizer has less effect.
You can still enjoy a powerful sound even at low volume levels.
Press ACTIVE LOUDNESS button to light ACTIVE indicator.

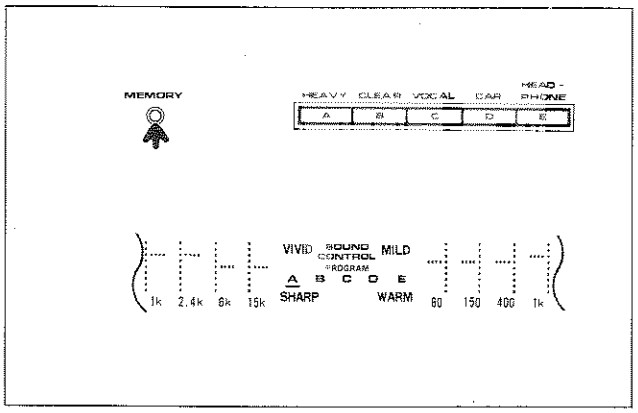
The original equalization curve and the active loudness curve will be displayed for a few seconds.

Press ACTIVE LOUDNESS button again to cancel.

Programming your own sound quality settings into memory

You can program up to five of your original sound quality settings into memory.

Using the memory



1. **Adjusting to achieve your desired sound**
2. **Press the MEMORY button.**
   - The bars under the A to E indicators light in sequence.
3. **Press the memory recall button (A to E) you want to use for programming.**
   - The bar under the pressed button's indicator (A to E) lights.
4. **Repeat procedures 1 to 3 to program into memory with other memory recall buttons.**

Recalling settings from memory

1. **Press the PRESET/PGM button, and select PROGRAM.**
   - The PROGRAM indicator in the display section lights.
2. **Press the memory recall button for the memorized setting that you wish to recall.**
   - The bar under the pressed memory recall button's indicator (A to E) lights.

MEMORIZING YOUR USUAL LISTENING SETTINGS (SMART OPERATION)

This function lets you recall your usual listening settings (usual operation switch and knob settings) at the push of a button.
Press the START/SET button, and the unit searches for an audio source that is ready to play, and automatically switches functions before starting playback from that source.
With PD-Z85M, put CDs in trays 1 and 2.

Operation

1. **Press the SMART OPERATION START/SET button.**
   A CD starts playing.
   When no disc is loaded .....
   ↓
   Playback of the tape in Deck I begins.

   When there is no tape loaded in Deck I .....
   ↓
   Playback of the tape in Deck II begins.

   When there is no tape loaded in Deck II .....
   ↓
   Sound from the tuner is output.

   If the TUNED indicator does not light at the received frequency .....
   ↓
   The function becomes CD.

Programming the setting

1. **Select the appropriate settings to be stored.**
2. **Press the MEMORY button.**
   - The SMART OPERATION indicator will blink.
3. **Press the START/SET button within 5 seconds.**
4. **The SMART OPERATION indicator will go off.**

NOTE:
Volume will be memorized at the setting that exists when memorization takes placed. However, high volume settings above or near the center position can not be memorized.

Recalling the memory

1. **Set to play back from the source you want to listen to.**
   - If you have memorized Tape in SMART OPERATION, load a tape.
   - If you have memorized CD, load a CD in the CD tray.
2. **Press the START/SET button.**
   - The SMART OPERATION indicator will blink.
   - When playback with a memorized function is not possible (for example, when CD has been memorized and there is no CD in the tray), search for the next audio source and operate manually in the same way as before programming the memory.

NOTE:
When playback from the source of a stored function (input selector) is not possible, switch the function as follows.

Stored function	Switching order
CD	CD → TAPE → TUNER → CD
TAPE	TAPE → CD → TUNER → CD
TUNER	TUNER → CD → TAPE → CD

MICROPHONE MIXING

Mixing involves combining the signals from two input sources (a microphone and a tape, for example).

MIXING PROCEDURE

1. **Plug a microphone into MIC jack.**
2. **Adjust VOLUME to a suitable level.**
3. **Set MIC LEVEL control to the center position between MIN and MAX.**
   - If howling occurs (a high-pitched sound from the speakers), take the following steps.
   1. Move the microphone away from the speakers.
   2. Lower the volume.
4. **Select the desired program source using input selector buttons.**
5. **Start playback of the program source.**
6. **Adjust VOLUME control.**
7. **Use MIC LEVEL control to adjust the microphone level in relation to the music source.**
8. **Talk or sing into the microphone.**

MIXING RECORDING

You can use the mixing feature to record together an input from a microphone and another source.

1. **Perform steps 1 to 7 in the section "MIXING PROCEDURE."**
2. **Load a tape for recording into deck II.**
3. **Press REC (●) button on deck II.**
4. **Press PLAY (► or ◄) button on deck II.**
5. **Sing along with the program source.**

NOTE:

When microphone mixing while playing back on Deck I, mixing recording is not possible on Deck II.

CASSETTE TAPE RELAY PLAYBACK

- When there are tapes in both Deck I and Deck II, relay play from Deck I to Deck II is possible.
- Relay playback is repeated as follows:

Deck I forward play (►) → Deck I reverse play (◄)

Deck II reverse play (◄) ← Deck II forward play (►)

- If there is a tape in only one of the decks, then it will be played continuously on both sides.

1. **Load the playback tapes into deck I and deck II.**
2. **Set DOLBY NR switch to the same position used for recording.**
3. **Press the appropriate PLAY switch (► or ◄) on deck I.**
4. **To stop relay playback, press STOP switch (■) of the operating deck.**

COPYING TAPES

Duplicating the recorded contents of one tape onto another tape is known as tape copying. The contents of the tape in deck I can be copied onto the tape in deck II (but not vice versa.) Copying is not possible while either deck is operating. You cannot record a source using the sound image controller.

If a tape recorded with the DOLBY NR system is copied, the copied tape will also be recorded automatically with DOLBY NR system. If a tape recorded without the DOLBY NR system is copied, the copied tape will also be recorded automatically without the DOLBY NR system.

1. **Load the recorded tape into deck I and the tape for recording into deck II.**
   - Wind the tape forward past the leader to the start of the magnetic coating portion.
   - Tape copying begins from the forward direction (►).
   - Both sides are copied from deck I to deck II.
   - Make sure there is no tape slack.
2. **To perform a normal copy while listening to playback, set input selector button on the amplifier to TAPE and select the DOLBY NR switch position.**

Even if input selector button is set to another position, tape copying will still proceed. The sound of the program source selected by input selector button will be heard through the speakers.

3. **Press one of SYNCHRO COPY I ► II buttons.**
   NORMAL: for tape copying at normal speed while listening to it.
   HIGH: for tape copying at about twice normal speed.
4. **Press STOP button (■) on either deck to stop the copying at any time.**

NOTE:

- *If you are using a TV in the vicinity of the unit, noise will be recorded. Either switch off the TV or move it away from the unit.*
- *There is variation in actual tape length even among cassettes of the same length label (C-60, C-90, etc.). Therefore, even if the recording tape is labeled as the same length as the playback tape, it is possible for the recording tape to end first without recording all of the contents of the playback tape.*

A.S.E.S. (Auto Synchro Editing System)

This function can be used with the Pioneer CD player PD-Z65, PD-Z75T or PD-Z85M.
For automatic recording of a CD to a cassette tape. This unit offers three kinds of A.S.E.S. operation.

A.S.E.S. operation

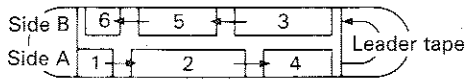
• The numbers are the CD track numbers

FADE:

• The sound fades out automatically at the end of the tape.
• The track that is faded out during recording on side A is recorded from the beginning again on side B.

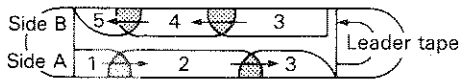
FINE:

• To minimize the amount of unused tape at the end of the tape length to be used, the CD player automatically programs track numbers (COMPU PGM). Tracks are then recorded in the order programmed.



DISCO:

• When recording, this provides cross-fade between tracks (the end of the track currently being recorded fades out as the beginning of the next track fades in).
• Sound also fades out at the end of the tape, in the same way as in the FADE mode.



When recording starts in the forward direction (▶) at the end of the tape, the tape reverses and recording resumes in the reverse (◀) direction.
In the FADE and FINE modes, a silent passage about five seconds long is inserted between tracks during recording.

[FADE, DISCO]

1. **Put a disc in the CD player.**
2. **Put a tape to be recorded in deck II.**
3. **Set DOLBY NR switch to the desired position.**
4. **To record the sound passed through the sound image controller, turn on SOUND CONTROL ON/OFF button and adjust the sound quality.**
5. **Press the desired ASES button [FADE (FINE) or DISCO].**

If tape remains, you can change CDs and continue recording by using ASES (FADE, DISCO only).
Perform 1-5, ASES will finish temporarily.

6. **Change CD.**
7. **Press PAUSE button.**
   • The Direction Indicator part of the display will flash in the direction of tape travel and recording will begin in that direction.
8. **Press ASES button (FADE or DISCO).**
   • Begin LINK ASES.
   • With LINK ASES if the CD playing time is shorter than the tape, ASES will finish in the REC PAUSE condition. If you wish to continue and record a different CD, change CDs and press the ASES button (FADE or DISCO).
   • In the following situation, ASES will finish in the STOP condition.
   *If the CD playing time is longer than the tape.

[FINE]

1. **Put a disc in the CD player.**
   • With PD-Z85M, put CDs in trays 1 and 2.
2. **Put a tape to be recorded in deck II.**
3. **Set DOLBY NR switch to the desired position.**
4. **To record the sound passed through the sound image controller, turn on SOUND CONTROL ON/OFF button and adjust the sound quality.**
5. **Perform COMPU EDIT with the CD player for the selected tape length.**
   • Please refer to the operating instructions of your CD player.
6. **Press the FADE (FINE) button.**

If you stop A.S.E.S. operation part way through, press Deck II's STOP button.

<A.S.E.S. operation>

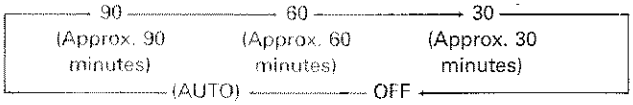
① The cassette tape for recording is rewound to the beginning.
② Recording on the cassette tape begins in the forward direction.
③ Playback begins on the CD player.
④ When one side is recorded, recording on the cassette tape begins in the reverse direction.

NOTE:

• *Fade-out recording may not occur with some tape types under some conditions.*
• *A.S.E.S. performs automatic recording from CD to tape, so do not attempt to perform manual operations during A.S.E.S. operation.*
• *A.S.E.S. may stop or operate incorrectly when there is a song change near the end of the tape. In such cases use manual operation to record the remaining songs.*

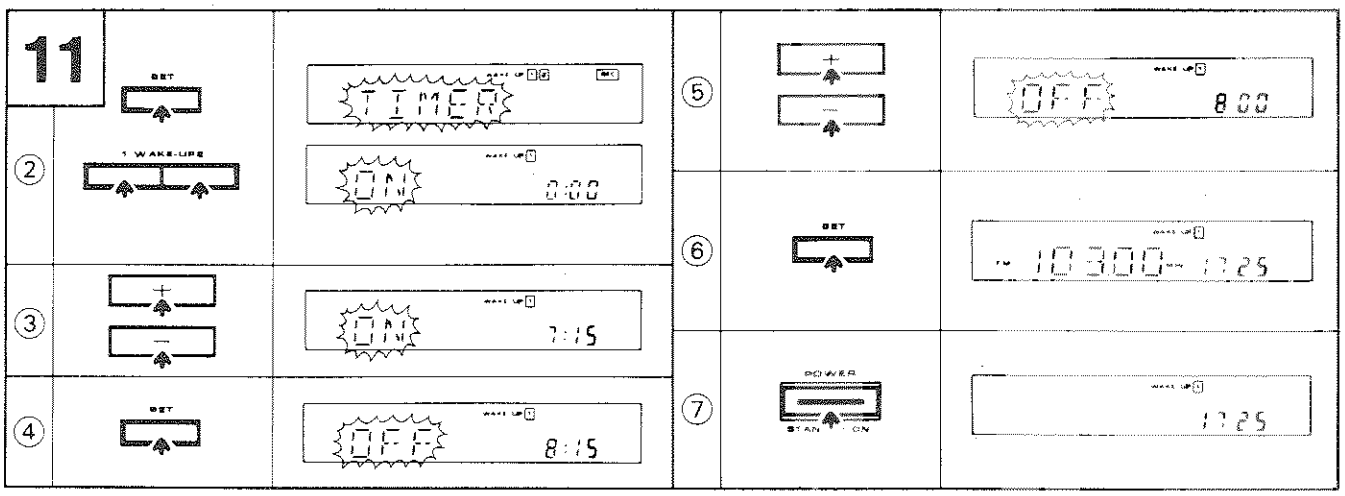
SLEEP TIMER — Automatically turns off power.

Sleep timer can be activated by remote control unit only. Power is turned off automatically after your set time has elapsed.
Each time you press the SLEEP key, the setting changes in the sequence shown here.



If you press the SLEEP button during recording, the unit switches to AUTO SLEEP.
In the AUTO SLEEP mode, power to the unit is automatically switched off at the end of recording.

TIMER PLAYBACK



(Use tuner for timer setting.)

- A compact disc, cassette deck, or a radio broadcast can be used instead of an alarm clock.
- The current settings will appear again at the time set with the timer.
- Timer playback begins everyday at the same time as long as the timer playback mode is not turned off.
- During timer playback, to receive a desired station, first program the channel frequency into STATION CALL button, and perform station call before setting the timer. If you do not do this, LAST is displayed in the display section, and you will return to the station you were previously listening to.

Tape playback:

- Timer playback is possible with a cassette tape loaded in Deck I.

Compact disc playback:

- The disc is played from the beginning when the timer turns the power on.

[Timer setting example] (See Fig. 11)

Set after switching power ON.
Setting WAKE-UP 1 to receive FM 103.00 MHz (9 CH) between 7:15 and 8:00.
(Use the same procedure when using WAKE-UP 2)

1. **Tune into FM 103.00 MHz (9 CH) with STATION CALL.**
2. **Press SET button and then (within 5 seconds) press WAKE-UP 1 button.**
3. **Use TUNING/TIMER "—" (DOWN) and "+" (UP) buttons to set the wake up hour and minutes.**
4. **Press SET button.**
   - When you press the SET button, the time after one hour is displayed in the display section (in this case, 8:15).
     To leave the OFF time as it is, press the SET button. To change the OFF time, perform the following procedure.
5. **Use TUNING/TIMER "—" (DOWN) and "+" (UP) buttons to set the turn off hour and minutes.**
6. **Press SET button.**

[To activate the timer]

7. **Turn power off.**

NOTE:

When timer playback operates, if the specified settings make playback impossible (there's no CD in the disc tray, no cassette tape is loaded, the TUNED indicator isn't lit at the tuned frequency), the input selector searches CD, TAPE, and TUNER, and automatically switches to a source that provides sound.

To change timer settings

- Repeat the procedure from the beginning to change settings.

If you make a mistake while setting the timer

- After inputting all the timer settings, repeat the timer setting procedure from the beginning.

Turning timer on and off

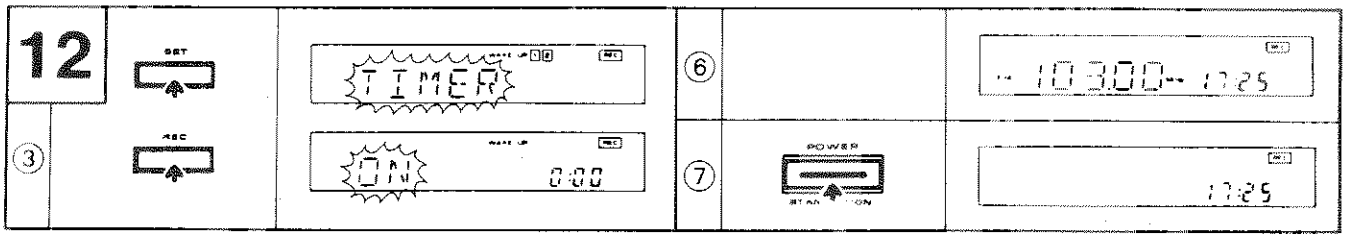
After inputting the timer settings, check the tuner display to confirm which timer is on. The one that is lit (WAKE-UP 1 or 2) is the one that will be executed. If you press a WAKE-UP button (1 or 2) to turn off the indication, then the timer will not operate. However, since the settings remain stored in memory, you can press the button again to reactivate the timer.

About the SNOOZE function

After timer playback begins, you can press the remote control unit's SNOOZE button to turn the power off once; it comes back on after approx. 5 minutes.

NOTE:

Power will stay off and play will not resume after 5 minutes if SNOOZE button is pressed when there is less than 5 minutes time remaining in the timer setting.



- Recording will start in the forward direction (▶).
- Timer recording is only possible with the tuner.
  (Be sure to tune into a station using station call, and input settings while listening).

NOTE:

- *Check to see that the cassette's accidental erasure prevention tabs have not been removed.*

[Timer setting example] (See Fig. 12)

Timer recording of FM 103.00 MHz (9 CH)

1. **Insert the tape to be recorded in Deck II.**
   - Timer recording begins in the forward direction (▶) so be careful which way you put in the tape.
2. **Set DOLBY NR switch on the cassette deck to the position of your choice.**
3. **Press SET button and then (within 5 seconds) press the timer REC button.**
   - The rest of the procedure is the same as steps 3 through 6 of "Timer playback" on page 22.

[Activating the timer for recording]

7. **Turn power off.**

Recording begins automatically at the selected time even if you do not turn off the power.

To change timer recording settings

- Repeat the procedure from the beginning to change settings.

If you make a mistake while setting the timer

- After inputting all the timer settings, repeat the timer setting procedure from the beginning.

Turning timer on and off

Confirm that REC is lit on the tuner display. Timer recording ends after being performed once. However, since the settings remain stored in memory, you can reactivate the timer by pressing the timer REC button so that REC is lit again.

Confirming WAKE UP TIMER and REC TIMER settings

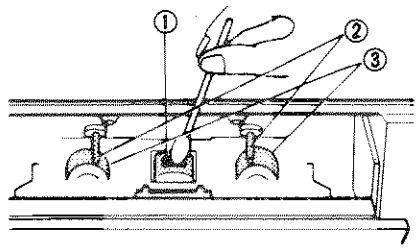
- Each time you press the CHECK button, the display changes in the order WAKE-UP 1, WAKE-UP 2, REC.
  The display will show sequentially the timer settings.

About timer setting priority

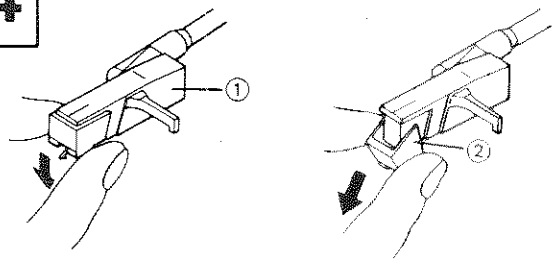
- When timer operation times overlap, the timer set to operate first has priority. The timer set to operate later does not operate.
- When timer ON times overlap, the order of priority of operation is REC, WAKE-UP 1, WAKE-UP 2.
- SLEEP has priority over the OFF time during timer operation.

MAINTENANCE

13



14



CLEANING THE HEAD SECTION

See Fig. 13.

① Head ② Capstan ③ Pinch roller

The heads, capstan and pinch roller are parts which are liable to get dirty quite easily. In particular, if the heads are dirty, the high frequency components of the sound will not be reproduced and the stereo balance will be impaired, resulting in a deterioration of sound quality. It is therefore recommended that the head section be cleaned regularly.

- Press EJECT button to open the cassette door.
- Dip a cleaning swab into head cleaning fluid and use it to wipe the head, capstan, and pinch rollers. Wait 2—3 minutes till cleaning fluid dries.

NOTE:

- *This unit uses a head-slant standby system, with the result that the heads are mounted at an angled position.*

DEMAGNETIZING THE HEAD

The recording/playback head becomes magnetized when you use the cassette deck for prolonged periods of time. This results in noise being generated and the treble dropping off during recording and playback. The recording/playback head should therefore be demagnetized regularly with a commonly sold head demagnetizer.
When demagnetizing the head, switch power ON to the cassette deck amplifier. To avoid adversely affecting the cassette deck amplifier and speakers, be sure to set the volume level to 0. Also disconnect the headphone plug from the PHONES jack.
For further details, refer to the operating instructions accompanying your head demagnetizer.

NOTE:

Do not hold a screwdriver, metal objects or magnets close to the heads.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

REPLACING THE STYLUS

1. **Remove the stylus gently. (See Fig. 14.)**
2. **Attach the new stylus to the cartridge.**

① Cartridge ② Stylus

NOTE:

- *The service life of the stylus on the supplied cartridge ranges from 800 to 1,000 hours. (After about one year if you play records about two hours everyday. However, the stylus may need to be replaced earlier depending on the way it is used.)*
- *Using a worn or damaged stylus can damage your records and distort the sound reproduction. Remember to replace the stylus at the earliest possible date.*
- *Always use the PIONEER "PN-210" as a replacement stylus.*
- *Always ask for a genuine PIONEER replacement stylus.*

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Cassette deck amplifier

Symptom	Cause	Remedy
Power switch is on but power does not turn on.	• AC cord is unplugged.	• Plug power cord into wall socket.
No sound from speakers.	• Volume is turned all the way down. • Speaker cords are disconnected. • Speaker cords are connected with vinyl insulation still on. • Input selector is not set to your desired listening source. • Connection cords are not connected or are damaged.	• Raise volume knob setting. • Connect speaker cords correctly. • Strip vinyl insulation from speaker wire tips before connecting. • Select correct input selector. • Connect correctly or replace with good quality cords.
Sound from only one speaker.	• One of the speaker cords is disconnected or damaged. • Incorrect Balance setting.	• Connect correctly or replace with good quality cord. • Set Balance to center position.
Screeching or howling sound heard during mic mixing.	• Microphone angle is bad. • Microphone is too close to speaker. • Volume is too loud.	• Change microphone angle. • Move microphone further away from speakers. • Reduce volume.
Tape does not move.	• Deck is in pause mode. • Cassette inserted incorrectly.	• Press PAUSE or PLAY button. • Put cassette properly in holder.
No sound heard from tape.	• Input selector not set to TAPE. • Playing unrecorded tape.	• Set to TAPE. • Play a recorded tape.
Tape sounds unclear, not loud enough.	• Dirty head.	• Clean head.
Can not record.	• Erasure prevention tabs are broken off. • Dirty head.	• Apply adhesive tape over tab holes. • Clean head.
Can not copy tape.	• One deck has no tape loaded. • Tape in deck II has erasure prevention tabs broken off.	• Load tapes in both decks. • Use cassette that can be recorded on.
Treble tones unclear.	• Dirty head. • DOLBY NR system is ON when listening to a tape recorded without DOLBY NR.	• Clean head. • Use same noise reduction system for playback as for recording. (Do not play tapes recorded with different NR systems.)
Treble tones too strong.	• Tape recorded with DOLBY NR but played without.	• Play in same condition as recording. (Turn on DOLBY NR switch for recorded tapes with DOLBY NR.)
Strange sounds heard (or recorded from) tape, CD, or radio.	• TV is on. • This unit is too close to TV.	• Turn off TV. • Move TV away until interference stops. • Copy using NORMAL instead of HIGH speed.
Music Search does not work.	• No 4-second space.	• Use tape with 4-second space between songs.
Sound image control has no effect.	• CD DIRECT button is on.	• Sound image controller can not be used when CD DIRECT is on.
CD Auto Function does not work.	• Flat cable not connected.	• Securely connect flat cable and audio cord.

Tuner

Symptom	Cause	Remedy
No reception.	• Antenna not connected. • Wrong radio band. • Station not tuned in. • Input selector not set to TUNER.	• Connect antenna correctly. • Set to desired radio band. • Tune in station. • Set to TUNER.
Beat noise heard.	• TV is on. • Loop antenna position bad.	• Turn off TV or move TV away. • Change loop antenna position.
Noise heard.	• Interference from nearby fluorescent light, hair dryer, or other electrical appliance. • Not tuned in correctly.	• Stop using device causing interference. • Use tuner controls to tune in station.
Sound is distorted.	• Antenna in poor position. • Broadcast is weak. • Interference from other electrical devices or multipath reception.	• Change antenna position. • Use external antenna. • Change antenna position.

Remote Control Unit

Remote control does not work.	• Batteries are dead or no batteries in remote control unit. • Poor angle or too great a distance from the remote sensor window. • There is an obstacle between you and the remote sensor window. • For CD player, the remote control cord is not connected. • A fluorescent light is shining on the remote sensor window.	• Insert new batteries. • Use within seven meters and within a 30 degree angle of the remote sensor window. • Change your position or move the obstacle. • Correctly connect the flat cable. • Turn off the light.

Clock and Timer

No time indication.	• There was a power blackout. • AC plug was pulled.	• Set time again. • Set time again.
Timer does not work.	• Current time is not set. • Start time is not set. • Timer is not on.	• Set current time. • Set ON times. • To use timer, press the timer selector button so that the timer display lights.

Turntable

Platter does not turn.	• Belt is off.	• Put belt correctly on platter.
No sound.	• Input selector not set to PHONO.	• Set to PHONO.
Noise or scratchy sounds.	• Dust on record. • Scratch on record.	• Clean record. • Use good record.

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.

SPECIFICATIONS

Cassette deck amplifier: DC-Z85

Amplifier Section

Continuously Average Power Output is 50 Watts* per channel, min., at 8 ohms from 40 Herz to 20,000 Herz, with no more than 0.4 % **total harmonic distortion.

**Measured pursuant to the Federal Trade Commission's Trade Regulation rules on Power Output Claims for Amplifiers.*

Music power (DIN)..... 100 W + 100 W (1 kHz, T.H.D. 1 %, 8 Ω)
Peak music power output..... 650 W (1kHz, T.H.D. 10%, 6Ω)
Graphic equalizer frequency band..... 60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 15 kHz, ±5.5 dB
Total Harmonic Distortion
(40 Hz to 20,000 Hz, 22.5 W, 8 Ω)**..... No more than 0.2 %

Cassette Deck Section

Systems..... 4 track, 2-channel stereo
Heads..... Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor..... DC servo 2 speed motor x 2
Wow and Flutter..... No more than 0.09 % (WRMS)
Fast Winding Time..... Approximately 105 seconds (C-60 tape)
Frequency Response (−20 dB recording):
TYPE I (Normal) tape..... 35 Hz to 14,000 Hz ±6 dB
TYPE II (HIGH/CrO_2) tape..... 35 Hz to 15,000 Hz ±6 dB
Signal-to-Noise ratio
Dolby NR OFF..... 56 dB
Noise Reduction Effect
Dolby B type NR ON..... More than 10 dB (at 5 kHz)

Furnished Parts

Operating Instructions..... 1
Remote Control Unit..... 1
Dry Cell Batteries ("AAA" (IEC R03/UM-4))..... 2

Miscellaneous

Power requirements
Australian model..... a.c. 240 Volts~, 50/60 Hz
Multi-voltage model
.....AC 110/120—127/220/240 V (switchable) 50/60 Hz
Power Consumption..... 336 W
Dimensions..... 360 (W) x 271 (H) x 309 (D) mm
Weight (without package)..... 8 kg

FM/AM tuner: F-Z95

FM Tuner Section

Frequency range..... 87.5 MHz to 108 MHz
Usable Sensitivity..... Mono: 12.8 dBf, IHF (1.2 µV/75 Ω)
Sensitivity (DIN)..... Mono S/N 26 dB: 1 µV/75 Ω
Stereo S/N 46 dB: 35 µV/75 Ω
Signal-to-Noise Ratio (IHF, 85 dBf Input)..... Mono: 77 dB
Signal-to-Noise Ratio (DIN)..... Mono: 66 dB
Stereo: 60 dB
Distortion..... Stereo: 0.5 % (1kHz)
Antenna Input..... 75 Ω unbalanced

AM Tuner Section

Frequency Range
With 10 kHz step..... 530 kHz to 1,700 kHz
With 9 kHz step..... 531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna)..... 350 µV/m
Antenna..... Loop Antenna

Miscellaneous

Dimensions..... 360 (W) x 68 (H) x 316 (D) mm
Weight (without package)..... 2.2 kg

Furnished Parts

FM Antenna..... 1
AM Loop Antenna..... 1

Turntable: PL-Z85

Motor, Platter

Motor Type..... DC servo motor
Drive Method..... belt drive
Speed..... 33-1/3, 45 RPM
Wow and Flutter..... 0.07 % WRMS (JIS)
0.10 % WTD Peak (DIN)
Signal-to-Noise Ratio..... 63 dB (DIN-B)
Platter..... 295 mm dia., aluminum die-cast

Tonearm

Type..... Dynamic balance type, straight tonearm

Installed Cartridge

Type..... MM Type
Stylus..... 0.6 mil diamond
Replacement Stylus..... PN-210
Output voltage..... 2.5 mV (1 kHz, 5 cm/s, Lat. peak)
Tracking Force..... 2.0 — 3.0 g (optimum 2.5 g)
Frequency Response..... 20 Hz to 25,000 Hz
Load Resistance..... 47 kΩ
Cartridge Weight..... 4 g

Miscellaneous

Dimensions..... 360 (W) x 90 (H) x 359.5 (D) mm
Weight..... 2.3 kg

Accessories

EP Adaptor..... 1

- *Specifications and design subject to possible modification without notice due to improvement.*

***Measured By Audio Spectrum Analyzer.*

[For stereo double cassette deck amplifier]

INFORMATION TO USER [FOR MULTI-VOLTAGE MODEL]

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate this equipment with respect to the receiver
- move this equipment away from the receiver
- plug this equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems."

This booklet is available from the US Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

The above instructions apply only to units which will be operated in the United States.

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

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